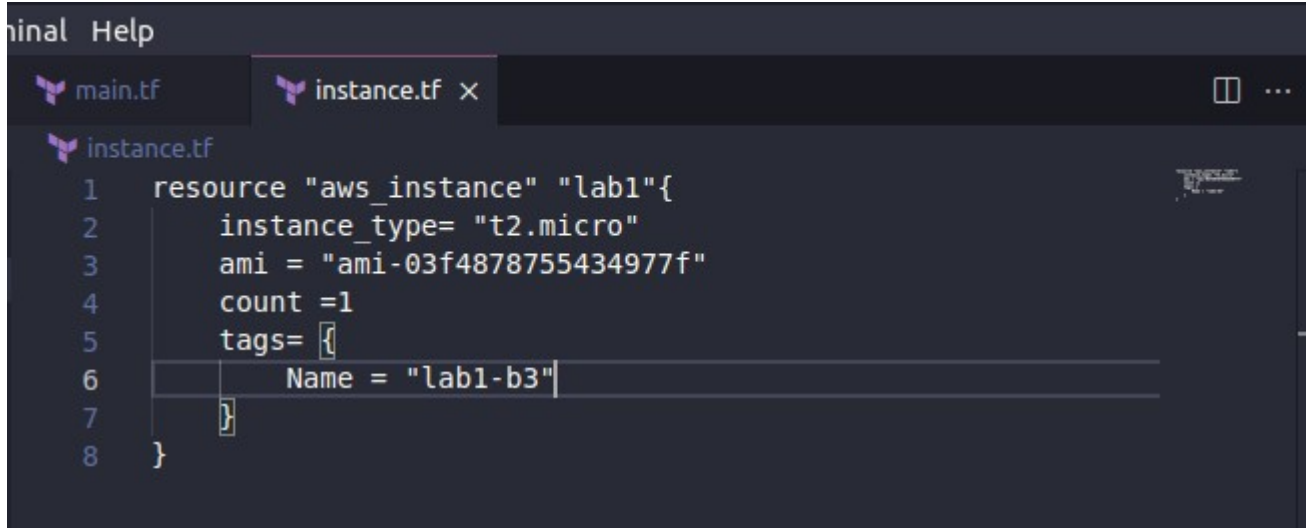


LAB-3

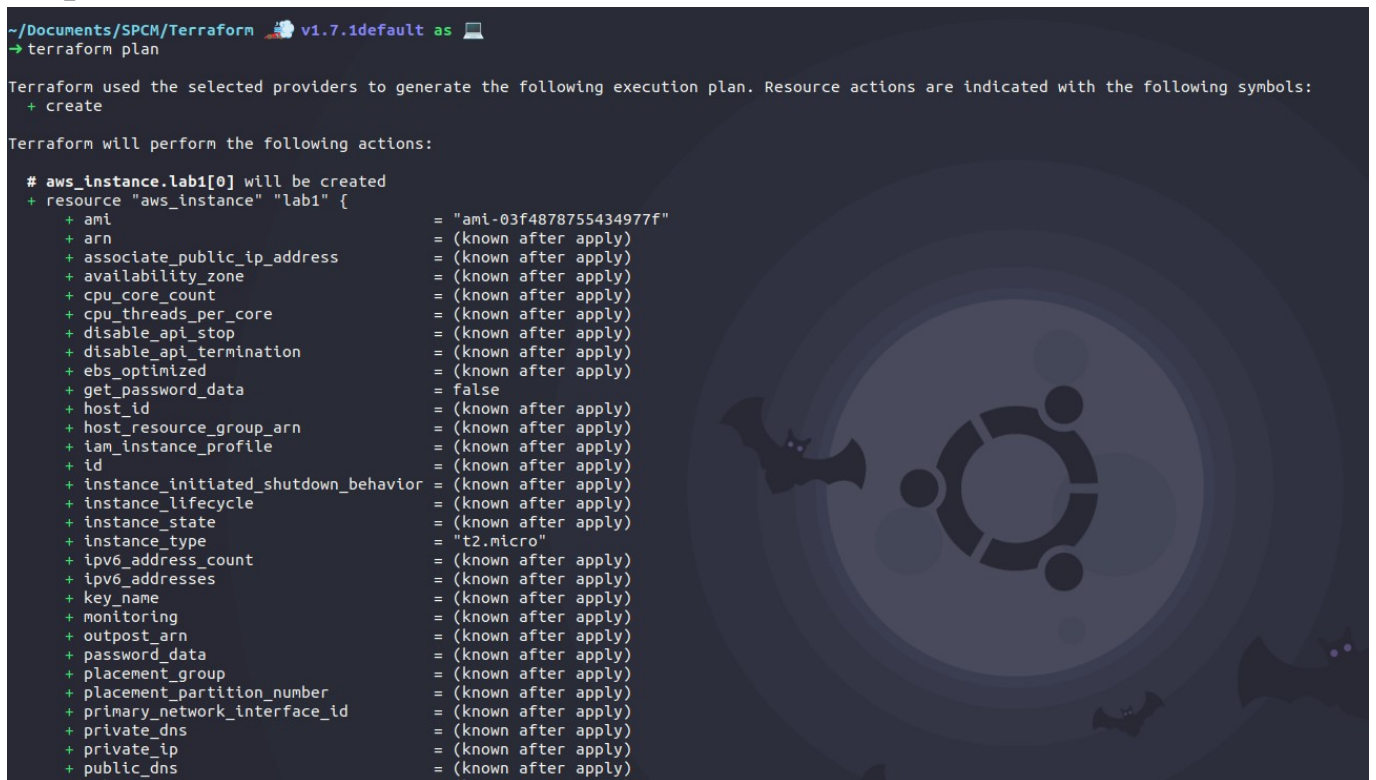
Provisioning on EC2 Instance on AWS

Step 1: Create Terraform configuration file for EC2 instance



```
main.tf  instance.tf x
instance.tf
1 resource "aws_instance" "lab1"{
2     instance_type= "t2.micro"
3     ami = "ami-03f4878755434977f"
4     count =1
5     tags= {
6         Name = "lab1-b3"
7     }
8 }
```

Step 2: Review Plan



```
~/Documents/SPCM/Terraform v1.7.1default as
→ terraform plan

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
+ create

Terraform will perform the following actions:

# aws_instance.lab1[0] will be created
+ resource "aws_instance" "lab1" {
  + ami                    = "ami-03f4878755434977f"
  + arn                   = (known after apply)
  + associate_public_ip_address = (known after apply)
  + availability_zone       = (known after apply)
  + cpu_core_count         = (known after apply)
  + cpu_threads_per_core   = (known after apply)
  + disable_api_stop       = (known after apply)
  + disable_api_termination = (known after apply)
  + ebs_optimized          = (known after apply)
  + get_password_data      = false
  + host_id                = (known after apply)
  + host_resource_group_arn = (known after apply)
  + iam_instance_profile    = (known after apply)
  + id                     = (known after apply)
  + instance_initiated_shutdown_behavior = (known after apply)
  + instance_lifecycle      = (known after apply)
  + instance_state          = (known after apply)
  + instance_type           = "t2.micro"
  + ipv6_address_count      = (known after apply)
  + ipv6_addresses         = (known after apply)
  + key_name                = (known after apply)
  + monitoring              = (known after apply)
  + outpost_arn             = (known after apply)
  + password_data           = (known after apply)
  + placement_group         = (known after apply)
  + placement_partition_number = (known after apply)
  + primary_network_interface_id = (known after apply)
  + private_dns             = (known after apply)
  + private_ip              = (known after apply)
  + public_dns              = (known after apply)
  + public_ip               = (known after apply)
  + subnet_id               = (known after apply)
  + tags                    = {
    + Name = "lab1-b3"
  }
  + vpc_security_group_ids = (known after apply)
}
```

Step 3: Apply Changes

```
~/Documents/SPCM/Terraform v1.7.1default as
→ terraform apply

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
+ create

Terraform will perform the following actions:

# aws_instance.lab1[0] will be created
+ resource "aws_instance" "lab1" {
  + ami                  = "ami-03f4878755434977f"
  + arn                  = (known after apply)
  + associate_public_ip_address = (known after apply)
  + availability_zone     = (known after apply)
  + cpu_core_count       = (known after apply)
  + cpu_threads_per_core = (known after apply)
  + disable_api_stop     = (known after apply)
  + disable_api_termination = (known after apply)
  + ebs_optimized        = (known after apply)
  + get_password_data     = false
  + host_id              = (known after apply)
  + host_resource_group_arn = (known after apply)
  + iam_instance_profile  = (known after apply)
  + id                   = (known after apply)
  + instance_initiated_shutdown_behavior = (known after apply)
  + instance_lifecycle   = (known after apply)
  + instance_state       = (known after apply)
  + instance_type        = "t2.micro"
  + ipv6_address_count   = (known after apply)
  + ipv6_addresses       = (known after apply)
  + key_name             = (known after apply)
  + monitoring           = (known after apply)
  + outpost_arn          = (known after apply)
  + password_data        = (known after apply)
  + placement_group      = (known after apply)
  + placement_partition_number = (known after apply)
  + primary_network_interface_id = (known after apply)
  + private_dns          = (known after apply)
  + private_ip           = (known after apply)
  + public_dns           = (known after apply)
  + public_ip            = (known after apply)
}
```

EC2 Dashboard

EC2 Global View

Events

Instances

Instance Types

Instances (1) Info

Find Instance by attribute or tag (case-sensitive)

Any state

Refresh

Connect

Instance state

Actions

| | Name | Instance ID | Instance state | Instance type | Status check | Alarm status | Availability Zone | Public IPv4 DNS | Public IPv4 ... |
|--------------------------|---------|--------------------|----------------|---------------|--------------|--------------|-------------------|--------------------------|-----------------|
| <input type="checkbox"/> | lab1-b3 | i-07737e00667daa44 | Running | t2.micro | Initializing | View alarms | ap-south-1a | ec2-13-127-217-244.ap... | 13.127.217.244 |

Step 5: Cleanup Resources

```
~/Documents/SPCH/Terraform v1.7.1default as took 54s
```

```
→ terraform destroy
```

```
aws_instance.lab1[0]: Refreshing state... [id=i-07737e000667daa44]
```

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:

- destroy

Terraform will perform the following actions:

```
# aws_instance.lab1[0] will be destroyed
```

```
- resource "aws_instance" "lab1" {
  - ami                  = "ami-03f4878755434977f" -> null
  - arn                  = "arn:aws:ec2:ap-south-1:698194348131:instance/i-07737e000667daa44" -> null
  - associate_public_ip_address = true -> null
  - availability_zone      = "ap-south-1a" -> null
  - cpu_core_count         = 1 -> null
  - cpu_threads_per_core   = 1 -> null
  - disable_api_stop       = false -> null
  - disable_api_termination = false -> null
  - ebs_optimized          = false -> null
  - get_password_data       = false -> null
  - hibernation             = false -> null
  - id                     = "i-07737e000667daa44" -> null
  - instance_initiated_shutdown_behavior = "stop" -> null
  - instance_state         = "running" -> null
  - instance_type          = "t2.micro" -> null
  - ipv6_address_count     = 0 -> null
  - ipv6_addresses         = [] -> null
  - monitoring             = false -> null
  - placement_partition_number = 0 -> null
  - primary_network_interface_id = "eni-0594cc18e5c9e5f09" -> null
  - private_dns            = "ip-172-31-33-243.ap-south-1.compute.internal" -> null
  - private_ip             = "172.31.33.243" -> null
  - public_dns             = "ec2-13-127-217-244.ap-south-1.compute.amazonaws.com" -> null
  - public_ip              = "13.127.217.244" -> null
```

The screenshot displays the AWS Management Console interface. On the left, a navigation sidebar lists various services including EC2 Dashboard, IAM, Events, and a list of EC2-related services like Instance Types, Launch Templates, and Reserved Instances. The main content area is titled 'Instances (1)' and shows a single instance, 'lab1-b3', with ID 'i-07737e000667daa44'. The instance's state is 'Terminated', and its type is 't2.micro'. The console also shows the instance's availability zone as 'ap-south-1a'. At the bottom of the console, there is a section titled 'Select an instance'.